

## ABSTRACT

## SUPPORTED LATE TRANSITION METAL CATALYST SYSTEMS

The invention encompasses late transition metal catalyst systems immobilized on solid supports and their use in heterogenous polymerization processes, particularly in gas phase polymerization of olefin monomers. Preferred embodiments include a late transition metal catalyst system comprising a Group 9, 10, or 11 metal complex stabilized by a bidentate ligand structure immobilized on a solid porous metal or metalloid oxide particle support, particularly those comprising silica. The gas phase polymerization process for olefin monomers comprises contacting one or more olefins with these catalyst systems under gas phase polymerization conditions.

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